

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/007527

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 A61P35/00 A61K45/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	MIACZYNSKA MARTA ET AL: "APPL proteins link Rab5 to nuclear signal transduction via an endosomal compartment." CELL, vol. 116, no. 3, 6 February 2004 (2004-02-06), pages 445-456, XP002318580 ISSN: 0092-8674 * p. 445-447, 450-454, figure 2,4 *	1-3
Y	WO 01/20022 A (MAX PLANCK GESELLSCHAFT ; RENZIS STEFANO DE (DE); ZERIAL MARINO (DE);) 22 March 2001 (2001-03-22) * abstract, p.2:10-6:14, 9:5-14:5, 15:20-21:22, 25:12-27:2, example 3, claims * ----- -/-	1-3

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

4 March 2005

Date of mailing of the international search report

22/03/2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 088 898 A (MAX PLANCK GESELLSCHAFT) 4 April 2001 (2001-04-04) * abstract, p. 2:19-5:21, 8:32-9:43, example 1,2,3, 4, claims *	1-3
P,Y	HABERMANN BIANCA: "The BAR-domain family of proteins: a case of bending and binding?" EMBO REPORTS. MAR 2004, vol. 5, no. 3, March 2004 (2004-03), pages 250-255, XP002318581 ISSN: 1469-221X * p. 251-254, figure 2,3 *	1-3
P,Y	MIACZYNSKA MARTA ET AL: "Not just a sink: endosomes in control of signal transduction." CURRENT OPINION IN CELL BIOLOGY. AUG 2004, vol. 16, no. 4, June 2004 (2004-06), pages 400-406, XP002318582 ISSN: 0955-0674 * p. 404, figure 1 *	1-3
A	DATABASE EMBL 'Online! 27 June 2002 (2002-06-27), "Homo sapiens DIP13 beta mRNA, complete cds." XP002318584 retrieved from EBI accession no. EM_PRO:AY113704 Database accession no. AY113704 the whole document	
A	MITSUUCHI Y ET AL: "Identification of a chromosome 3p14.3-21.1 gene, APPL, encoding an adaptor molecule that interacts with the oncoprotein-serine/threonine kinase AKT2" ONCOGENE, BASINGSTOKE, HANTS, GB, vol. 18, 1999, pages 4891-4898, XP002965023 ISSN: 0950-9232	
A	DE RENZIS STEFANO ET AL 00022002: "Divalent Rab effectors regulate the sub-compartmental organization and sorting of early endosomes" NATURE CELL BIOLOGY, 'Online! vol. 4, no. 2, February 2002 (2002-02), pages 124-133, XP002318583 ISSN: 1465-7392 the whole document	

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 4-7
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 4-7

Present claims 4-6 relate to a compound defined by reference to a desirable characteristic or property, namely modulating the cellular localisation of RAB5 bound APPL1 or APPL2.

The claims cover all compounds having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT for very limited number of such compounds. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible.

Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the compound by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, said claims have not been searched.

Present claim 7 relates to an assay comprising amongst others the following steps: a) isolating hemosomes b) restoring their functionality and c) modulating their function by substances that modulate amongst others the recruitment of Rab5 on hermesome. "Hermosome" is an internal designation which has no established meaning in the art, and consequently, its function is also unknown. The substances of step c) are only defined reference to a result to be achieved. Hence, a meaningful search of claim 7 is impossible.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/007527

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 0120022	A	22-03-2001	EP	1088898 A1		04-04-2001
			CA	2384306 A1		22-03-2001
			WO	0120022 A1		22-03-2001
			EP	1214446 A1		19-06-2002
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EP 1088898	A	04-04-2001	EP	1088898 A1		04-04-2001
			CA	2384306 A1		22-03-2001
			WO	0120022 A1		22-03-2001
			EP	1214446 A1		19-06-2002